

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/13/98

Date Received: 04/09/98

Project: Metro KC Grab, PO# M10656

Date Samples Extracted: 04/09/98

Date Extracts Analyzed: 04/10/98

**RESULTS FROM THE ANALYSIS OF THE WATER SAMPLE
FOR CHROMIUM, COPPER, NICKEL, ZINC
USING METHOD 6010**

Samples Processed Using Method 3005A

Results Reported as mg/L (ppm)

<u>Sample ID</u>	<u>Chromium</u>	<u>Copper</u>	<u>Nickel</u>	<u>Zinc</u>
M10656	0.25	0.19	0.22	<0.05
Method Blank	<0.05	<0.05	<0.05	<0.05

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QUALITY ASSURANCE RESULTS FOR TOTAL METALS BY INDUCTIVELY COUPLED PLASMA (ICP) (METHOD 6010)

Laboratory Code: 804048-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference	Acceptance Criteria
Chromium	mg/L (ppm)	0.25	0.26	4	0-20
Copper	mg/L (ppm)	0.19	0.20	5	0-20
Nickel	mg/L (ppm)	0.22	0.21	5	0-20
Zinc	mg/L (ppm)	<0.05	<0.05	nm	0-20

Laboratory Code: 804048-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	% Recovery MS	% Recovery MSD	Acceptance Criteria	RPD
Chromium	mg/L (ppm)	5	0.25	92	98	80-120	6
Copper	mg/L (ppm)	5	0.19	89	94	80-120	5
Nickel	mg/L (ppm)	10	0.22	95	100	80-120	5
Zinc	mg/L (ppm)	5	<0.05	95	99	80-120	4

Laboratory Code: Laboratory Control Sample


Analyte	Reporting Units	Spike Level	% Recovery LCS	% Recovery LCSD	Acceptance Criteria	RPD
Chromium	mg/L (ppm)	5	99	103	80-120	4
Copper	mg/L (ppm)	5	98	96	80-120	2
Nickel	mg/L (ppm)	10	103	110	80-120	7
Zinc	mg/L (ppm)	5	103	109	80-120	6

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

4/9/98 ~~CS~~ AI
12:40 pm mm

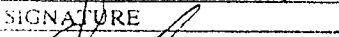

SAMPLE CHAIN OF CUSTODY

Send Report To: Alaskan Copper Works Contact Gerald A. Thompson
Company 628 HANSEN ST
Address Seattle WA 98134
City, State, Zip (206) 382-8379 FAX # (206) 382-4309
Phone # 4-9-98 Date

OFFICE NO.	PROJECT NAME	PURCHASE ORDER #
7238	METRO KX GRAB	m10656
PURCHASER'S (signature) 		PROJECT LOCATION
		3200 6th Ave S.

REMARKS	SAMPLE DISPOSAL INFORMATION
Rush" See Manual	<input type="checkbox"/> Dispose after 30 days <input checked="" type="checkbox"/> Return Samples <input type="checkbox"/> Call for Instructions

[illegible]

SIGNATURE	PRINT NAME	COMPANY	Date	Time
Received by: 	GERALD Thompson	ALW	9/9/98	12:40 PM
Received by: 	MANUEL MARTI	F & BT	4-9-98	12:40
Received by:				
Received by:				

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Charlene Jensen, M.S.
Bradley T. Benson, B.S.
Kurt Johnson, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
FAX: (206) 283-5044
e-mail: fbi@isomedia.com

April 13, 1998

DUPLICATE COPY

INVOICE #98ACU0413-1

Accounts Payable
Alaskan Copper Works
628 South Hanford St.
Seattle, WA 98134

RE: Project Metro KC Grab, PO# M10656: Results of testing requested by
Gerry Thompson for material submitted on April 9, 1998.

1 water sample analyzed for
Chromium, Copper, Nickel, and Zinc
using Method 6010 @ \$65 per sample

\$ 65.00

Amount Due

\$ 65.00

FEDERAL TAX ID (b) (6)

FRIEDMAN & BRUYA, INC.

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Seattle, WA 98119-2029
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e-mail: fbi@isomedia.com

April 13, 1998

Gerry Thompson, Project Manager
Alaskan Copper Works
628 South Hanford St.
Seattle, WA 98134

Dear Mr. Thompson:

Included are the results from the testing of material submitted on April 9, 1998 from your Metro KC Grab, PO# M10656 project. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Manuel Marti
Project Manager

Enclosures
ACU0413R.DOC